

5

based on one time printing process, so that a certain luminance and contrast is implemented during a driving discharge.

In addition, the black powder 17a formed of a black pigment and glass frit and the white powder 17b formed of Ag con-exist between particles which are not fully separated at a boundary portion, so that a coupling force between layers is enhanced, and it is possible to prevent any escape at the boundary portion.

In addition, when forming an Ag material bus electrode, comparing the conventional electrode formation process as shown in FIG. 4 with the structure of a discharge sustaining electrode according to the present invention, in the conventional art, a paste is formed and printed two times for forming a black layer and white layer. Therefore, in the conventional art, the productivity is decreased, and a crack occurs at an interlayer boundary. However, in the present invention, since a black layer and white layer of a bus electrode are implemented by one time printing process, so that the productivity is enhanced, and it is possible to form an electrode of a thin film below 5 μm .

As described above, in the present invention, since one time printing process is performed using Ag paste mixed with black and white Ag powders having different specific gravity, it is possible to form a bus electrode having a better luminance and contrast, whereby the productivity is increased.

In addition, a thin film printing operation of an electrode is implemented, so that a malfunction which may occur during the discharge due to a rough surface of a dielectric layer is decreased, and it is possible to enhance the characteristic of a PDP discharge.

Although the preferred embodiment of the present invention have been disclosed for illustrative purposes, those

6

skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as recited in the accompanying claims.

What is claimed is:

1. In a method for forming a discharge sustaining electrode in which a transparent electrode and an Ag non-transparent electrode are integrally formed at an image display side substrate among two substrates which form a plasma display panel, a method for forming a non-transparent electrode, comprising;
 - a first step for coating Ag paste including some black powder and some white powder having different viscosity particles on the transparent electrode;
 - a second step for level-separating the black and white powders contained in the coated Ag paste based on a specific gravity difference for a certain time; and
 - a third step for burning out a binder from the coated Ag paste to thereby implementing a firing process.
2. The method of claim 1, wherein in said leveling step, said black powder is stacked on a lower portion, and said white powder is positioned at an upper portion.
3. The method of claim 1, wherein the specific gravity of the black powder is greater than the specific gravity of the white powder.
4. The method of claim 1, wherein the specific gravity of the black powder is higher than 7, and the specific gravity of the white powder is lower than 3.
5. The method of claim 1, wherein said black powder is formed of a black pigment and glass frit.
6. The method of claim 5, wherein said black pigment is formed of a metallic oxide selected from the group comprising Cr, Co and Mn.

* * * * *